N PROGRESS

CANAL, CONDUIT, SIPHON & PIPE LINES

February 14 to February 27, 1937

CANAL, CONDUIT AND SIPHON (MILES)

	Completed	Remaining
Excavation	133.30	12.37
Concrete	128.65	17.02
Back Fill	61.37	21.09

DISTRIBUTION PIPE LINE (MILES)

	Completed	Remaining
Excavation	27.26	18.75
Concrete	25.56	20.45
Back Fill	24.73	21.28

AQUEDUCT

SCHED. NO.	CONTRACTOR	FEATURES	Length In Feet	EXCAVATION—Feet Period	EXCAVATION—Feet To Date	EXCAVATION—Feet Remain'g	CONCRETE—Feet Period	CONCRETE—Feet To Date	CONCRETE—Feet Remain'g	BACKFILL—Feet Period	BACKFILL—Feet To Date	BACKFILL—Feet Remain'g
1	AQUEDUCT CONSTR. CO.	Conduit and Siphons	22,025	0	22,025	0	0	22,025	0	0	22,025	0
2	BARRETT & HILP AND MACCO CORP.	Conduit and Siphons	30,569	0	29,984	585	729	27,371	3,198	0	24,015	6,554
3		Canal and Siphons	40,499	0	40,499	0	223	40,446	53	0	7,800	4,545
4	JAHN & BRESSI CONSTR. CO.	Canal and Siphons	53,218	0	53,218	0	0	53,218	0	0	3,075	0
6	WOOD AND BEVANDA	Siphon	15,521	0	15,521	0	0	15,521	0	0	13,043	2,478
7	BARRETT & HILP & MACCO CORP.	Canal and Conduit	27,707	0	27,707	0	0	27,707	0	0	12,170	0
8	WOOD AND BEVANDA	Canal and Siphons	49,339	0	49,339	0	0	49,339	0	0	7,090	800
9	UTAH CONSTRUCTION CO.	Canal, Conduit and Siphons	47,363	0	47,363	0	0	47,363	0	0	5,264	935
10	AQUEDUCT CONSTR. CO.	Canal and Siphons	44,505	0	44,505	0	0	44,505	0	0	3,594	1,256
11		Canal, Conduit and Siphons	44,003	0	43,460	543	7,419	35,626	8,377	925	4,683	5,640
12	THREE COMPANIES, INC.	Conduit and Siphons	32,977	93	31,620	1,357	68	24,731	8,246	0	23,030	9,947
13	AQUEDUCT CONSTR. CO	Canal, Conduit and Siphons	31,965	0	31,965	0	0	31,965	0	0	1,940	1,725
14	THOMPSON-STARRETT CO.	Conduit and Siphons	32,366	0	32,366	0	0	32,366	0	0	32,366	0
15		Conduit and Siphons	35,849	2,150	28,627	7,222	2,698	23,897	11,952	3,020	21,558	14,291
16		Conduit and Siphons	19,359	0	0	19,359	0	0	19,359	0	0	19,359
17	M. W. D.—FORCE ACCT.	Conduit and Siphons	21,950	0	21,950	0	175	21,824	126	259	17,624	4,326
18	J. F. SHEA CO., INC.	Conduit and Siphons	27,537	0	27,537	0	246	27,346	191	749	26,457	1,080
19	J .F. SHEA CO., INC.	Conduit and Siphons	37,364	623	1,184	36,180	0	0	37,364	0	0	37,364
20		Siphons	18,618	0	18,618	0	0	18,618	0	0	18,618	0
20 A & B	M. W. D.—FORCE ACCT.	Siphons	735	0	705	30	0	0	735	0	0	735
3	WINSTON BROS. CO. & WILLIAM C. CROWELL	Siphon (Gene Inlet)	1,877	0	1,850	27	0	1,798	79	0	1,478	320
4		Siphon (Copper Basin)	450	0	450	0	131	248	202	0	0	0
	TOTALS		635,796	2,866	570,493	65,303	11,689	545,914	89,882	4,953	245,830	111,355

DISTRIBUTION PIPE LINES

1	AMER. CONC. & STL. PIPE CO.	Precast Concrete Pipe	12,277	0	0	12,277	0	0	12,277	0	0	12,277
2	WESTERN PIPE & STL. CO.	Welded Steel Pipe	54,530	1,132	38,571	15,959	0	29,829	24,701	540	29,231	25,299
3	AMER. CONC & STL. PIPE CO.	Precast Concrete Pipe	20,124	0	0	20,124	0	0	20.124	0	0	20,124
4			25,867	0	25,867	0	0	25,867	0	0	25,867	0
5			24,895	1,308	24,892	3	1,456	24,876	19	2,058	24,697	198
6	J. F. SHEA CO., Inc.	Precast Concrete Pipe	27,348	2,026	25,063	2,285	2,007	24,937	2,411	1,996	23,238	4,110
7			30,044	0	0	30,044	0	0	30,044	0	0	30,044
8	UNITED CONC. PIPE CORP.	Precast Concrete Pipe	24,529	0	24,529	0	0	24,529	0	0	24,529	0
9			8,697	0	0	8,697	0	0	8,697	0	0	8,697
10			10,517	2,175	4,986	5,531	2,173	4,928	5,589	1,902	3,010	7,507
11			4,105	0	0	4,105	0	0	4,105	0	0	4,105
	TOTALS		242.933	6,641	143,908	99,025	5,636	134,966	107,967	6,496	130,572	112,361

Miscellaneous Construction

February 14 to February 27, 1937

AQUEDUCT PUMPING PLANTS AND APPURTENANT WORKS

CONTRACTOR	FEATURES	EXCAVATION—Cu. Yds. Est.Quan.	Period	To Date	%	CONCRETE—Cu. Yds. Est.Quan.	Period	To Date	%	STEEL—Tons Est.Quan.	Period	To Date	%
WINSTON BROS. CO. & WILLIAM C. CROWELL	Intake Plant	106,312	813	107,125	100.	18,145	1,229	11,687	64.4	1,712	157.0	711.2	41.5
	Gene Plant	92,600	76	89,830	97.0	13,379	1,125	10,577	79.1	2,052	136.7	1,659.9	80.9
WOOD AND BEVANDA	Iron Mt. Plant	358,700	24,562	300,802	83.9	19,897	972	14,542	73.1	1,707	51.0	877.7	51.4
L. E. DIXON CO.	Eagle Plant	250,000	0	231,102	92.8	21,122	1,671	5,498	26.0	2,160	0	156.7	7.3
L. E. Dixon & Case Const. Co.	Hayfield Plant	328,900	9,380	297,545	90.5	32,319	22	22	0.1	2,738	0	0	0
	TOTALS		34,831	1,026,404			5,019	42,326			344.7	3,405.5	

PARKER RESERVOIR—SIX COMPANIES, INC.

FEATURES	Est. Quan.	Period	To Date	Percent
Diversion Tunnels—Excav.	3,463 Ft.	0	3,463	100
Diversion Tunnels—Concrete	3,363	0	3,363	100
Dam, Forebay, etc., Excav.	2,107,700 C.Y.	59,105	1,246,637	59.1
Dam Concrete	260,000 C.Y.	0	0	0

CAJALCO RESERVOIR—GRIFFITH COMPANY

FEATURES	Est. Quan.	Period	To Date	Percent
Diversion Tunnel	2,000 Ft.	0	2,000	100
Dam & Dike Excavation	651,000 C.Y.	1,510	510,857	78.5
Dike Fill	4,182,000 C.Y.	60,000	3,605,000	86.2
Dam Fill	3,410,000 C.Y.	21,400	955,600	28.0

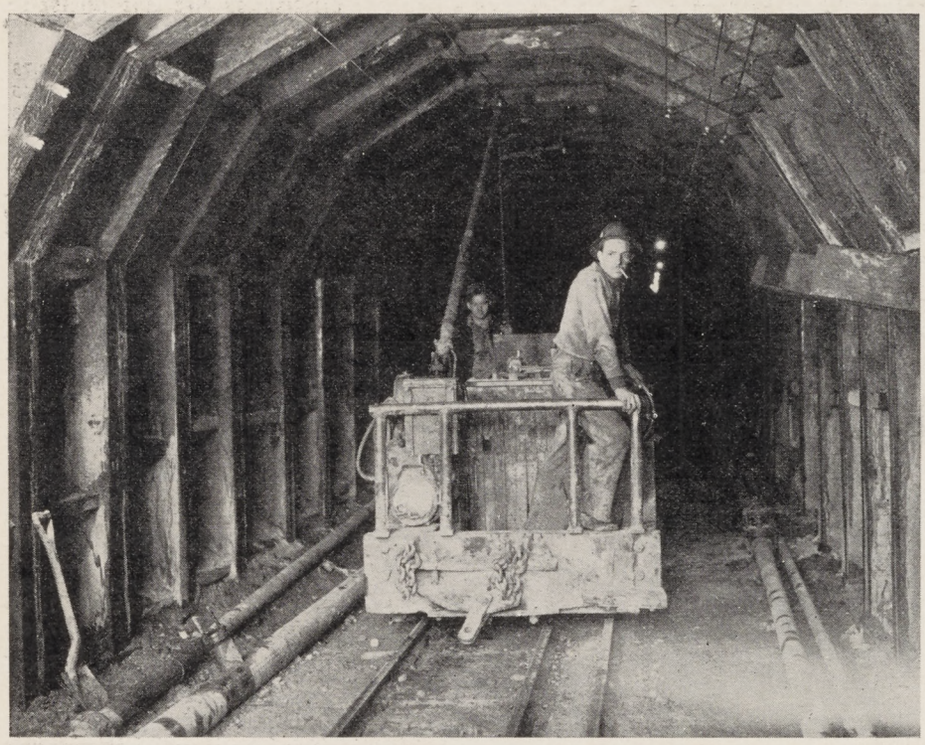
BOULDER TRANSMISSION LINE—FRITZ ZIEBARTH

FEATURES	Length-Line Mi.	Period	To Date	Percent
Footings Constructed	237.0	9	229	96.6
Towers Erected	237.0	11	213	89.9
Wire Strung	237.0	6	179	75.5

COMPLETED FEATURES

CANAL, CONDUIT AND SIPHON

CONTRACTOR	FEATURE AND NAME OR SCHEDULE	Length in Miles	Work Started	Work Completed
UNITED CONC. PIPE CO	LITTLE MORONGO SIPHON	0.13	2-27-34	8-20-34
M.W.D —FORCE ACCT.	FAN HILL COND. & SIPHON	0.32	10-21-33	11-19-34
MORRISON-KNUDSEN CO.	BIG MORONGO & SAN ANDREAS SIPHONS	1.86	2-12-35	9-16-36
GRIFFITH COMPANY	Sch. No. 20-C, 21, 22, 23, 23A	12.79	1-5-35	10-13-36
JAHN & BRESSI Const. Co.	Sch. No. 5, CANAL & SIPHON	10.15	12-18-34	11-17-36
	TOTALS	25.25		



A motor emerging from the portal of Monrovia tunnel No. 4. Note the two rail gages. The wide gage is used by the trolley motor on the steep grade at the western end of the tunnel.

Monrovia No. 4 Due to Hole Out

Following close on the holing through of Monrovia tunnel No. 3, will be the holing through of Monrovia tunnel No. 4, being constructed by Dixon, Bent and Johnson. Daylight in Monrovia Canyon is expected to be reached during the week ending March 20.

This tunnel, running between Monrovia Canyon and Santa Anita Canyon, is 8,133 feet long, all of which has been driven through rock formation. It is one of the "unusual" tunnels on the aqueduct because of the steep grade in its western portion.

This part of the tunnel, extending 2,856 feet east of the west portal, is driven on a 6.05 per cent grade—the most pronounced in any tunnel on the aqueduct system. Because of the grade, this part of the tunnel was hand mucked, loading onto a belt conveyor. It also required the use of a trolley motor which runs on a wider gage track than that used by the muck cars. Battery locomotives, of the same gage as the cars, haul the trains along the flatter section of the tunnel east of this grade.

W. N. Evans is the contractor's superintendent on the job which was started October 28, 1935. Best driving progress was in January, 1937, when 930 lineal feet was excavated. All excavation operations have been carried on from the west portal of the tunnel in Santa Anita Canyon.

Schedule 6P Soon To Be Completed

The J. F. Shea Company will complete the laying of pipe on Schedule 6P of the distributing system about March 13, according to the latest progress reports. This schedule is being constructed of precast concrete pipe which is being fabricated in the contractor's plant in Claremont.

Schedule 6P is 27,348 feet long, the pipe joints being 11-feet 8-inches inside diameter, and 12 feet in length. The first work on this section of the Distribution Division was started on June 15, 1936. Don Lind is General Superintendent for the contractor, and James B. "Jimmy" Kelley is gantry foreman on placing operations. Ed Wintz is the District's senior inspector on the work.

Included in the same contract is Schedule 7P of similar construction, and tying into the western end of Schedule 6P. These two schedules extend from the eastern boundary of Ontario to the San Dimas Wash in the vicinity of Glendora, a distance of more than 10 miles.

Arch Completed in Contract Tunnels On Main Aqueduct

During the week ending February 27, Winston Brothers concreting crews completed the placing of tunnel arch lining in the Coxcomb tunnel, a total length of 17,795 feet. The completion of this part of that tunnel's lining also completed the placing of arch lining in all contract tunnels on the main aqueduct.

Most of these main aqueduct tunnels have been entirely completed, although invert still remains to be placed in the Coxcomb and the East Eagle Mountain tunnel. In addition to these, the placing of arch lining in the force account work in the Coachellas is rapidly nearing completion.

On March 6, there only remained 1579 feet of arch to be placed in these tunnels. This section is in Berdoo, east of the adit. Present rate of progress is about 1500 feet per week on this job, which indicates that the lining will probably be placed about the time this issue of the NEWS is distributed.

INDEX FOR 1936 ISSUES OF "NEWS" NOW AVAILABLE

For the benefit of those who are keeping a permanent file of the Colorado River Aqueduct News, an index has been prepared for all articles published during the year 1936—Volume III, No. 1 to 24 incl. Copies of this index may be obtained by writing to the District at its Los Angeles office.



Where the outside is the inside. One of the inside steel forms being used by Thompson-Starrett on conduit construction, Schedule No. 15.